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### NOTICE OF ALLOWANCE AND FEE(S) DUE

22879 7590 08/10/2010 HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Road

FILING DATE

10/01/2003

EXAMINER

ZHE, MENG YAO

ART UNIT PAPER NUMBER

2195 DATE MAILED: 08/10/2010

200300561-1

Mail Stop 35 FORT COLLINS, CO 80528

APPLICATION NO.

10/677.159

ATTORNEY DOCKET NO. CONFIRMATION NO.

8180

TITLE OF INVENTION: RUNTIME VIRTUALIZATION AND DEVIRTUALIZATION OF MEMORY BY A VIRTUAL MACHINE MONITOR

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(s) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 11/10/2010

FIRST NAMED INVENTOR

David E. Lowell

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further<br>indicated unless corrects<br>maintenance fee notifica   | correspondence includir<br>ed below or directed oth<br>tions   | ng the Patent, advance on<br>herwise in Block 1, by (a  | rders and notification of r<br>a) specifying a new corres  | naintenance fees wi<br>pondence address;  | II be<br>and/or                             | mailed to the current<br>(b) indicating a sepa  | con                                    | respondence address as<br>"FEE ADDRESS" for  |
|---|--|---|--|---|---|---|--|--|
| CURRENT CORRESPOND  | Dane   | Note: A certificate of mailing can only be used for domestic mailings of the<br>Fee(s) Transmittal. This certificate cannot be used for any other accompanying<br>papers. Each additional paper, such as an assignment or formal drawing, must  |  |   |   |   |  |  |
| HEWLETT-PA<br>Intellectual Prop<br>3404 E. Harmon   |  | have its own certificate of mailing or transmission.  Certificate of Mailing or Transmission  bereby certify that this (Feed) Transmissi is being deposited with the United States Potal Service with sufficient postage for first class mall in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimale transmitted to the USPIO (5/1) 273-2888, on the date indicated below. |  |   |   |   |  |  |
| Mail Stop 35<br>FORT COLLIN   | S. CO 80528  |   |  |   |   |   |  | (Depositor's name)   |
|   | ,  |   |  |   |   |   |  | (Signature)  |
|   |  |   |  |   |   |   |  | (Date)   |
| APPLICATION NO.   | FILING DATE  |   | FIRST NAMED INVENTOR   |   | ATTORNEY DOCKET NO. CONFIRMATION NO.        |   |  |  |
| 10/677,159  | 10/677,159 10/01/2003  |   | David E. Lowell  |   | 200300561-1                                 |   | 8180                                   |  |
|   |  |   | TUALIZATION OF MEM   |   |   |   |  |  |
| APPLN, TYPE   | SMALL ENTITY   | ISSUE FEE DUE   | PUBLICATION FEE DUE  | PREV. PAID ISSUE  | FEE   |   |  | DATE DUE   |
| nonprovisional  | NO   | \$1510  | \$300  | \$0   |   | \$1810  |  | 11/10/2010   |
| EXAM  | IINER  | ART UNIT  | CLASS-SUBCLASS   | J   |   |   |  |  |
| ZHE, ME   |  | 2195  | 718-001000   |   |   |   |  |  |
| 1. Change of correspondence address or indication of "Fee Address" (3 CFR 1.853).  Change of correspondence address (or Change of Correspondence Address form PTOS/P1/22) attacked.  The Address from PTOS/P1/27 indication for "Fee Address" indication form PTOS/P3/P1/3 (190.10-2) or more receal attached. Use of a Custom Number is required.  ASSIGNIEE ANDR AND RESIDENCE DATA TO BE PRINTED O |  |   | (1) the aames of up to 3 registered patent attorneys casens OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to single firm (having as a member a registered attorney or agent) and the names of up to single firm (having as a member a registered attorney or agent) and the names is single firm (having as a registered attorney) and the name is single firm (having as a registered attorney) and the name of the name o |   |   |   |  |  |
| PLEASE NOTE: Uni<br>recordation as set fort<br>(A) NAME OF ASSI   | less an assignee is ident<br>h in 37 CFR 3.11. Comp<br>GNEE  | ified below, no assignee<br>pletion of this form is NO  | data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY  | ntent. If an assigne<br>assignment.<br>and STATE OR Co  | DUNT  | RY)   |  |  |
| 4a. The following fee(s)  Issue Fee Publication Fee (N  | vo small entity discount p   |   | b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo   | d. Form PTO-2038  | is atta                                     | ched.<br>required fee(s), any de  | ficie                                  |  |
|   | s SMALL ENTITY state   | is. See 37 CFR 1.27.  | ☐ b. Applicant is no lon   |   |   |   |  |  |
| NOTE: The Issue Fee an<br>interest as shown by the  | d Publication Fee (if req<br>records of the United Sta   | uired) will not be accepte<br>tes Patent and Trademark  | d from anyone other than to<br>Office.   | he applicant; a regis   | tered :                                     | uttorney or agent; or th  | ne as                                  | signee or other party in   |
| Authorized Signature  |  |   |  | Date  |   |   |  |  |
| Typed or printed name   |  |   | Registration No.   |   |   |   |  |  |
| This collection of inform<br>an application. Confiden<br>submitting the complete<br>this form and/or suggests<br>Box 1450, Alexandria, V<br>Alexandria, Virginia 223  | nation is required by 37 C<br>tiality is governed by 35<br>d application form to the<br>ions for reducing this but<br>'irginia 22313-1450. DC<br>k13-1450. | FR 1.311. The informatic<br>U.S.C. 122 and 37 CFR<br>USPTO. Time will vary<br>rden, should be sent to the<br>ONOT SEND FEES OR  | on is required to obtain or r<br>1.14. This collection is est<br>r depending upon the indiv<br>e Chief Information Office<br>COMPLETED FORMS TO  | etain a benefit by th<br>imated to take 12 m<br>idual case. Any cor<br>er, U.S. Patent and 1<br>D THIS ADDRESS. | e publ<br>inutes<br>nment<br>fraden<br>SENI | ic which is to file (and<br>to complete, includir<br>s on the amount of tin<br>ark Office, U.S. Dep<br>O TO: Commissioner | d by<br>ng ga<br>me y<br>artm<br>for I | the USPTO to process)<br>athering, preparing, and<br>rou require to complete<br>ent of Commerce, P.O.<br>Patents, P.O. Box 1450, |

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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FORT COLLINS, CO 80528

# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

| APPLICATION NO.      | FILING DATE                    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |  |  |
|----------------------|--------------------------------|----------------------|-------------------------|------------------|--|--|--|
| 10/677,159           | 10/01/2003                     | David E. Lowell      | 200300561-1             | 8180             |  |  |  |
| 22879 75             | 22879 7590 08/10/2010 EXAMINER |                      |                         |                  |  |  |  |
| HEWLETT-PAC          | KARD COMPANY                   | ZHE, MENG YAO        |                         |                  |  |  |  |
| Intellectual Propert |                                |                      | ART UNIT PAPER NUMBER   |                  |  |  |  |
| 3404 E. Harmony I    | Road                           | 2195                 |                         |                  |  |  |  |
| Mail Stop 35         |                                |                      | DATE MAILED: 08/10/2010 |                  |  |  |  |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1125 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1125 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

#### Application No. Applicant(s) 10/677,159 LOWELL, DAVID E Notice of Allowability Examiner Art Unit MENGYAO ZHE 2195 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 3/15/2010. 2. X The allowed claim(s) is/are 1, 4-16, 18-28, 30-36, 38-47, 49-59, 61-67, now renumbered as claims 1-60. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. | Notice of References Cited (PTO-892)

2. Notice of Draftperson's Patent Drawing Review (PTO-948)

Information Disclosure Statements (PTO/SB/08).

Paper No./Mail Date

4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. Notice of Informal Patent Application

Interview Summary (PTO-413), Paper No./Mail Date

7. X Examiner's Amendment/Comment

8. T Examiner's Statement of Reasons for Allowance

9. ☐ Other .

/Lewis A. Bullock, Jr./

Supervisory Patent Examiner, Art Unit 2193